



A DOCPHOENIX

Advisory Action

Application No.

09/314,698

Examiner

Juliet C. Einsmann

Applicant(s)

PERRIN ET AL.

Art Unit

1655

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 February 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check only a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☐ In view of the early submission of the proposed reply (within two months as set forth in MPEP § 706.07 (f)), the period for reply expires on the mailing date of this Advisory Action, OR continues to run from the mailing date of the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 27 February 2001. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will be entered upon the timely submission of a Notice of Appeal and Appeal Brief with requisite fees.
3. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search. (see NOTE below);
 - (b) ☐ they raise the issue of new matter. (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

4. ☒ Applicant's reply has overcome the following rejection(s): objections to informalities in claim 11.
5. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
6. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
7. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
8. ☒ For purposes of Appeal, the status of the claim(s) is as follows (see attached written explanation, if any):
- Claim(s) allowed: _____
- Claim(s) objected to: _____
- Claim(s) rejected: 1-10 and 12-26.
- Claim(s) withdrawn from consideration: _____
9. ☐ The proposed drawing correction filed on _____ a) ☐ has b) ☐ has not been approved by the Examiner.
10. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
11. ☐ Other:

Continuation of 6.

Due to applicant's amendments, the rejections previously applied to claim 11 are now applied to claim 26 which is merely a copy of claim 11 with the informalities noted in the previous office action corrected.

The arguments have been considered but are not persuasive for the reasons that follow. The rejections are maintained.

Rejections over Kayne et al. in view of Gress et al. (claims 1-10, 12-14, 21, and 26)

The fundamental difference between the method of Kayne et al. in the instantly claimed method is that in the methods of Kayne et al. undefined sequences are in solution and the defined nucleic acid sequences are bound to a solid support. Beyond that difference, the teachings of Kayne et al. meet all of the limitations of the instant claims as discussed in the rejections in paper number 8. Gress et al. clearly provide the teaching and motivation for changing the method of Kayne et al. so as to anchor the undefined sequences in the method taught by Kayne et al. onto a solid support, as Gress et al. specifically teach that methods which employ such a step allow for the screening of thousands of clones simultaneously as well as the possibility of automation (see paper number 8).

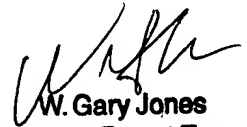
Applicant argues at page three that Gress et al. lack any motivation for substituting hybridization with an undefined sequence as taught by Kayne with a probe corresponding to previously arrayed or sequence fragments. However, this Kayne et al. specifically teach the use of probes corresponding to previously arrayed or sequenced fragments (p. 2, line 8 of Kayne et al.) and therefore, does not need to be provided by Gress et al. As discussed above, Gress et al. is relied upon merely for the suggestion modify the teaching of Kayne et al. so that the undefined sequences are bound to a solid support. Upon this modification of the method of Kayne et al. the ordinary practitioner would have therefore used the labeled probes taught by Kayne et al. in solution.

Applicant further argues at page four that the rejection over Kayne et al. in view of Gress et al. do not meet the limitation of claims 21 and 26 which require identifying at least one immobilized fragment that hybridizes weakly or does not hybridize to a labeled probe. However, Kayne et al. specifically teach the identification of non-hybridized nucleic acid sequences (see abstract and p. 9, lines 9-10). When the teachings of Kayne et al. are modified in view of the teachings of Gress et al. (as discussed above and in paper number 8) these non-hybridized sequences would indeed be immobilized.

Applicant argues that the teachings of Kayne et al. and Gress et al. do not teach repeating the steps of the instant invention, as required by claims 12-14 and 26. However, Kayne et al. do teach that in some cases it is desired to repeat some steps in the method to control the size and content of the resulting subtraction library (p. 8, lines 7-9), and they specifically teach that "it is preferred that multiple rounds of hybridization are carried out" (p. 8, line 13). Considering this teaching of Kayne et al., it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have repeated any of the steps in the method for the added benefit of increasing the amount of sequences detected. Further, "selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results" (MPEP 2144.04). In the instant case, applicant is simply choosing to repeat already disclosed steps, and this would have been obvious to one of ordinary skill in the art.

Rejection under Pinkel et al. in view of Schena et al.

Applicant argues that the placing a coated glass surface on an optical fiber array would result the blocking of transmission of light through the optical fibers. However, the rejection does not suggest placing a glass surface on an optical fiber, instead the rejection suggests substituting the glass surface for the optical fiber array. The rejection provides motivation for such a substitution from the teachings of Schena et al. (see paper number 8, pages 7-8).


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